



# **AGNICO EAGLE**

**MELIADINE GOLD PROJECT**

**ENVIRONMENTAL REPORT: MARCH 2017**

**WATER LICENCE 2BB-MEL1424**

**SUBMITTED TO THE  
NUNAVUT WATER BOARD**

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**A. This monthly report is delivered under water license 2BB-MEL1424, PART J, Item 13.**

**1. *The Licensee shall maintain Monitoring Stations at the following locations:***

*Table 1: Monitoring stations*

Monitoring Program Station Number	Description	Status
MEL-1	Raw water supply intake at Meliadine Lake	Active (Volume cubic metres)
MEL-2	Raw water supply intake at Pump, A8 or other Lakes	Active (Volume cubic metres)
MEL-5	Point of discharge for the Bermed Fuel Containment Facilities	Active
MEL-6	Effluent from the Landfarm Treatment Facility prior to release	New
MEL-7	Final Effluent Discharge from the BIODISK treatment system	Active
MEL-8	Point of discharge or runoff from the Non-Hazardous Waste Landfill	(New) Active

**2. *The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp, drilling and other purposes from all sources.***

MEL-1	Daily average (m <sup>3</sup> )
Camp	36.14
Construction	0.00
MEL-2 (A8)	
Underground	1.54
Drilling	0.90
March Daily Average	43.12
Total March	1337
Total 2017	3279

MEL-1: 541943E, 6989174N

MEL-2 (A8): 540076E, 6987731N

**3. *The Licensee shall measure and record the volume of all soil from all locations entering the Landfarm Treatment Facility.***

No contaminated soil was brought to the landfarm in March.

4. *The Licensee shall assess and record the concentration of F1 – F4 fractions in petroleum hydrocarbon contaminated soil, according to the CCME Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil that is entering the Land Treatment Unit from all sources and excavations.*

No soil samples were taken in March as Agnico Eagle is not planning to take soil out of the landfarm in the near future due to frozen conditions.

5. *The Licensee shall provide the GPS coordinates (in decimal degrees) of all locations where wastes associated with camp operations and exploration activities are deposited.*

Landfill:

Latitude: 63.030631

Longitude: -92.22089

6. *Licensee shall sample at Monitoring Program Station MEL-7, monthly during wastewater effluent discharge. Samples shall be analyzed for the parameters listed under Part G Item 11.*

**Biochemical Oxygen Demand – BOD5**

**Total Suspended Solids**

**Oil and Grease (and visual)**

**Fecal Coliforms**

**pH**

Four (4) samples were collected during the month. A Fecal Coliforms exceedance was recorded on March 13, 2017. The water license limit is 1000 CFU/100mL and March 13<sup>th</sup> result was 7000 CFU/100mL. This was reported as a spill to appropriate authorities. The follow up report will be submitted during the month of April.

Station: STP-FINAL		March			
DATE	Limits	3/6/2017	3/13/2017	3/23/2017	3/27/2017
Ammonia as N (mg/L)		40.0	64.0	37.0	29.00
Biochemical Oxygen Demand	80	43.0	43.0	8.0	14.0
Kjeldahl nitrogen		43.00	63	36.00	29.00
pH	6.0 - 9.5	7.3	7.54	7.07	7.14
Phosphorus (P)-Total		12.0	14	12.0	14.0
Total Suspended Solids	100	5.0	13	3.0	7.0
Nitrite-N		2.47	1.98	4.95	1.29
Nitrate-N		17.1	6.1	30.6	23.5
Nitrate and Nitrite as N		19.6	8.06	35.50	24.70
Oil & Grease-(IR)	5	0.5	2.7	<0.50	0.8
Fecal Coliforms (CFU/100mL)	1000	<2	7,000.0	<10	<2

7. ***The Licensee shall, prior to the release of effluent from the Bermed Fuel Containment Facilities at Monitoring Program Station Mel-5 and the Landfarm Treatment Facility at Monitoring Program Station MEL-6 for the purpose of demonstrating compliance, sample for the parameters listed under Part D item 15.***

➤ In March, no water was released from MEL-5 or MEL-6.

8. ***The Licensee shall obtain representative samples of the water column below any ice where required under part F, Items 5 and 6. Monitoring shall include but not limited to the following:***

***Total Suspended Solids***

***pH***

***Electrical Conductivity, and***

***Total trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn), and Trace Arsenic and Mercury.***

➤ Drilling was conducted on Lake A8 in March. Prior to drilling samples were collected on March 3. After drilling samples will be collected in April or May and a comparison will be completed at that time. Results will be provided in the relevant Monthly Monitoring Summary Report.

***B. Modify the monthly monitoring reports, starting April 2016, to include, at a minimum, waste water treatment options; and modifications of the freshet action plan.***

1. ***Waste water treatment options:*** In March, no water was transferred from/to the P-cells due to frozen conditions.
2. ***Modifications of the freshet action plan:*** An updated version of the Freshet Action Plan was submitted with the 2016 Annual Report on March 31, 2017.
3. ***Seep:*** There were no active seeps in March due to frozen conditions.

During the 2017 freshet, Agnico Eagle will assess seepage rates at DP1-B and DP3-A as requested by INAC Inspector on November 10, 2016.